



KNOWLEDGE ORGANISER

2021-22

YR7



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A Guide to Using your Knowledge Organisers

What is a knowledge organiser?

In this booklet you will find knowledge organisers for every subject you study at Madani. Your teachers have thought about **the most important key vocabulary, diagrams, information, and ideas that you need to know to understand each topic and have summarised them on one A4 sheet of paper** for you. The information has been organised into clear tables, diagrams or key points to make the knowledge organiser easy to use and to understand.

How will Knowledge organisers help you?

People remember what they have learned by thinking about it often, and by linking key knowledge to other ideas within a topic. Your knowledge organisers include the key information and ideas for the topic you are studying, so that you can think about how these ideas are linked to what you are learning in each lesson. **This means that you are thinking about these key ideas many times as you study the topic.** This will make it easier to remember what you have learned and add new knowledge each lesson

Your knowledge organisers are also useful if you have been absent because the knowledge organiser will include the key ideas from the lesson you missed. This will make it much easier to understand and catch up with the activities you need to complete independently.

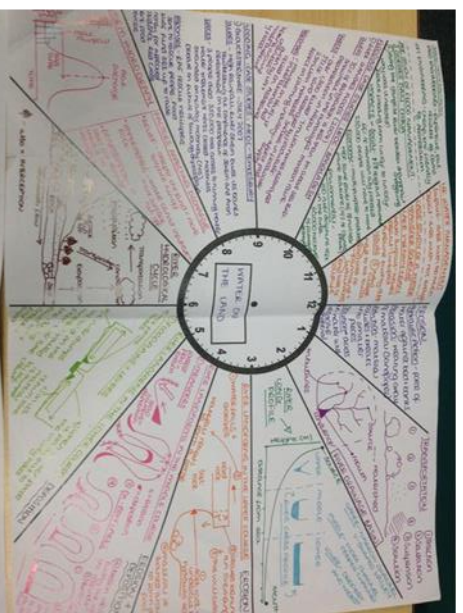
How can you use your knowledge organisers?

There are many activities that you can do using your knowledge organisers. Try some of the ones explained below:

Homework: Your teachers may assign homework linked to your knowledge organisers to help you understand key terms and ideas from the topic. This will help you prepare for your next lesson and understand the new information more clearly

Independent Research: You could do your own research to learn more about the key ideas included in your booklet

Creating more revision and learning tools: You can use the information on your knowledge organiser to create mind-maps or revision clocks. You can do this by taking the key ideas from the knowledge organiser and creating your mind-map or Round the Clock sheet (like the one shown below with 12 sections for information – just like a clock) by starting with the main ideas from your knowledge organiser and adding all the specific detail you remember from your lessons to the different sections of your mind-map or Round the Clock Diagram.



They are great for revision and testing your level of knowledge:

Test yourself: Because knowledge organisers include the key information and ideas for each topic, you can use them to help you revise for tests. You can self-quiz by covering sections of the knowledge organiser and testing yourself to see what you remember. Then uncover the information on your knowledge organiser and see if you were correct.

See how well you know the topic: Turn your knowledge organiser over and create a mind-map or write everything you know about the topic on a blank piece of paper. Then turn over the knowledge organiser and check to see if your information is correct or if there is anything that you missed. Revise it and make sure you will remember more the next time.

Create your own quizzes: Use the knowledge organiser to write your own set of questions based on the information included. Once you have a set of questions, turn the knowledge organiser over and see if you can remember the answers. Make sure you revise anything that you couldn't answer so that you will be able to next time. Try to answer the questions each week and see if you are able to remember more each time.

Create your own flashcards. For example, you could write the key terms from your knowledge organiser on one side of the card and the definition on the other. Then use the cards to quiz yourself.

Many of the key ideas you need to know for exams are on the mind-map. If it is included on the knowledge organiser your teacher thinks it is important for you to know it and you can expect it to be tested on an exam in some way.

It is important to remember that knowledge organisers don't include all the information that you need to know – only the main ideas. You can use them to help you remember the detail from your lessons.

How can your parents/carers use knowledge organisers to help you learn?

Read through the organiser with someone in your family and explain the information included in the knowledge organiser to them. Make sure you use examples and provide as much detail as you can, and then answer any questions your family member might have. Teaching someone else what you know helps you to understand the key ideas more clearly and helps you remember them more easily next time.

Ask your family to test or quiz you on the information included in the knowledge organiser. You should try to do this regularly and keep track of what you remember to see if you improve each time.

Ask your family to read out sections of the knowledge organiser to you, but to miss out key words or pieces of information and see if you can fill in the key terms or knowledge.

Ask your family to test you regularly on the spellings of key words until they are perfect. Make a note of the ones that you spell incorrectly to make sure that you know them next time.



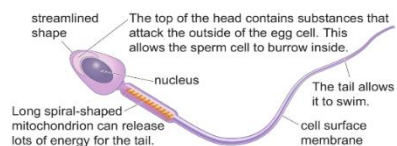
Animal Sexual Reproduction

Offspring	The new organisms produced by reproduction.
Sexual Reproduction	Reproduction that needs two parents to produce offspring.
Gametes	Sex cells
Sperm	Gamete that males make
Egg	Gamete that females make
Fertilisation	Sperm enters an egg cell and nuclei fuse forming a fertilised egg cell.
External Fertilisation	The sperm and egg cell meet outside of the body. e.g. fish
Internal Fertilisation	The sperm and egg cell meet inside the body.
Using External Fertilisation	Large numbers of eggs are produced because many get washed away. The parents don't look after their young.
Using Internal Fertilisation	Fewer egg cells produced because sperm is more likely to reach egg. The parents usually look after their young.

Male Reproductive System



Sperm Cell Adaptations



Puberty When males start to produce sperm cells.

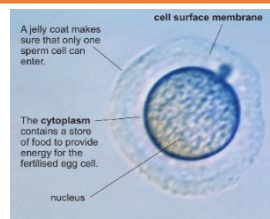
Reproductive Organs

Testes	Where sperm cells are made.
Scrotum	Bag of skin containing the testes.
Sperm Ducts	Sperm travels through here after leaving the testes.
Glands	Fluids are added to the sperm- it is now called semen.
Urethra	The tube the semen leaves the body through.

Female Reproductive System



Egg Cell Adaptations



Puberty egg cells in female start to mature.

Becoming Pregnant

Sexual Intercourse	The erect penis is inserted into the vagina.
Ejaculation	Semen is pumped out of the urethra.
Route the sperm takes	Vagina → sucked up through cervix → uterus → oviduct → meets egg cell
Implantation	If fertilisation occurs the cell starts to divide forming an embryo which will then sink into the uterus lining. The woman is now pregnant.
Amniotic Fluid	Watery fluid to protect growing embryo / foetus.
Amnion	Bag containing the amniotic fluid.
Placenta	Allows oxygen, food and water to be passed from mother's blood into embryo's blood. Waste materials (like carbon dioxide) pass from embryo's blood into mother's blood.
Umbilical Cord	Carries the embryo's blood to and from the placenta.

Growing Up

Sex Hormones	Released by brain, tests & ovaries- start puberty.
Changes to Boys During Puberty	Voice deepens, shoulders widen, hair grows, testes/ penis grow, sperm produced.
Changes to Girls During Puberty	Breasts develop, hair grows, hips widen, ovaries start to release eggs.
Menstrual Cycle	Days 1-5: uterus lining lost from body (menstruation) Days 6-14: egg cell starts to mature and is released around day 14 (ovulation) Days 14+: egg cell swept towards uterus, if not fertilised cycle starts again.

Gestation & Birth

Gestation Period	The time from fertilisation until birth.
Foetus	When an embryo develops a full set of organs we call it a foetus (around 8 weeks).
Ultrasound Scans	Produce images of foetus to check for problems.
Harm to Baby	Alcohol, drugs, cigarette smoke and viruses can pass through placenta and harm foetus.
Premature	Baby born small and early.
Labour	The act of giving birth.
Stages of Giving Birth	1. contractions start and cervix begins to widen. 2. amnion breaks and amniotic fluid leaves vagina. 3. cervix at 10cm, stronger contractions pushes baby through. 4. Umbilical cord cut.
Afterbirth	The placenta is passed out of the vagina- end of labour.
Mammary Glands	Produces milk for babies- contains nutrients and antibodies to protect from disease

Energy From Food

Energy	Needed to live, helps us to grow and repair our bodies, move and keep warm. Food is a source of energy.
Joule	A unit for measuring energy.
Kilojoule	1000J = 1kJ
Diet	The food that a person eats.
Weight	The amount of force with which gravity pulls things- measured in Newtons (N).
Balanced Diet	Eating a variety of foods to provide all the things that the body needs.
Nutrients	Substances needed from food.

Energy transfers and stores

Transferred	When energy is moved from one store into another.
Forces	A push, pull or twist and a type of energy transfer.
Electricity	A way of transferring energy through wires.
Stored	When energy is captured within an object and can be moved to another store by energy transfers.
Chemical Energy	Energy stored in chemicals (such as food, fuel and batteries).
Kinetic Energy	Energy stored in moving things.
Thermal Energy	Energy stored in hot objects.
Strain Energy	Energy stored in stretched or squashed objects. Also called elastic potential energy.
Gravitational Potential Energy	Energy stored in objects in high places that can fall down.
Nuclear Energy	Energy stored inside materials (also called atomic energy).
Law of Conservation of Energy	The idea that energy can never be created or destroyed, only transferred from one store to another.

Fuels

Fuel	A substance that contains a store of chemical or nuclear energy that can easily be transferred.
Nuclear Fuels	Used in nuclear power stations to generate electricity.
Uranium	A radioactive metal that can be used as a nuclear fuel.
Generate	To produce electricity.
Fossil Fuels	A fuel formed from the dead remains of organisms over millions of years.
Coal	A fossil fuel made from the remains of plants.
Oil	A fossil fuel made from the remains of microscopic dead plants and animals that lived in the sea.
Natural Gas	A fossil fuel made from the remains of microscopic dead plants and animals that lived in the sea.
Non-Renewable	An energy resource that will run out because we cannot renew our supplies of it.
Renewable	An energy resource that will never run out (such as solar power)
Biofuels	A fuel made from plants or animal droppings.
Fuel	A substance that contains a store of chemical or nuclear energy that can easily be transferred.
Hydrogen	Can be used as a fuel by combining with oxygen from the air to produce electricity.

Using Resources

Fossil Fuel Advantages	Cheap compared to the others and convenient to use in cars/vehicles.
Fossil Fuel Disadvantages	Non-renewable Releases polluting gases when burnt.
Nuclear Advantages	No polluting gases generated.
Nuclear Disadvantages	Non-renewable Very expensive Dangerous waste materials
Renewable Advantages	No polluting gases Renewable
Renewable Disadvantages	Most not available all the time and only available in specific locations.
Climate Change	Fossil fuels are making the earth warmer due to the carbon dioxide given off when they are burnt.
Efficiency	How much of the energy transferred by a machine is useful.
Using Less Fossil Fuels	Using efficient appliances, insulating homes, public transport/walking/cycling

Other Energy Sources

Solar Power	Generating electricity using energy from the Sun.
Solar Panel	Flat plates that use energy from the Sun to heat water.
Solar Cell	Flat panels that use energy transferred by light from the Sun to produce electricity.
Solar Power Station	A large power station using the Sun to heat water to make steam which then generates electricity.
Wind Turbine	Generates electricity using energy transferred from the wind.
Hydroelectric Power	Electricity generated by moving water turning turbines and generators.
Geothermal Power	Electricity generated using heat from rocks underground.

Addition & Subtraction Of Fractions-Keywords

Numerator: the number above the line on a fraction. The top number. Represents how many parts are taken.

Denominator: the number below the line on a fraction. The number represents the total number of parts.

Equivalent: of equal value.

Mixed numbers: a number with an integer and a proper fraction.

Improper fractions: a fraction with a bigger numerator than denominator.

Substitute: replace a variable with a numerical value.

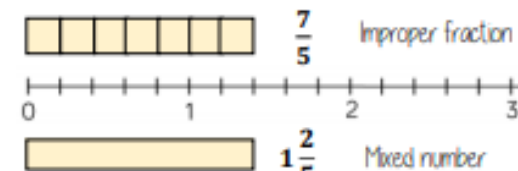
Place value: the value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right.

What I Need To Be Able To Do

By the end of this unit you should be able to:

- Convert between mixed numbers and fractions
- Add/Subtract unit fractions (same denominator)
- Add/Subtract fractions (same denominator)
- Add/Subtract fractions from integers
- Use equivalent fractions
- Add/Subtract any fractions
- Add/Subtract improper fractions and mixed numbers
- Use fractions in algebraic contexts

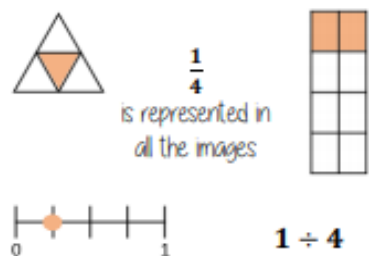
Mixed Numbers and Fractions



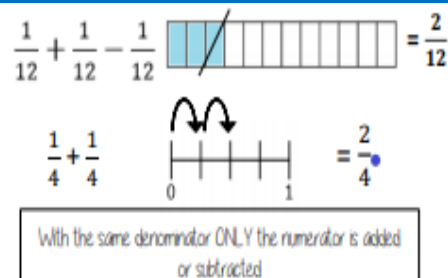
In this model 5 parts make up a whole

Fractions can be bigger than a whole

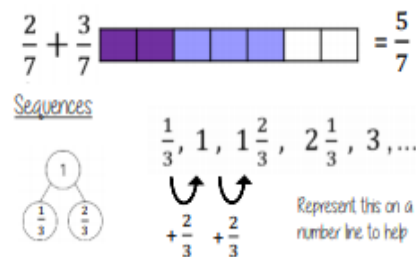
Representing Fractions



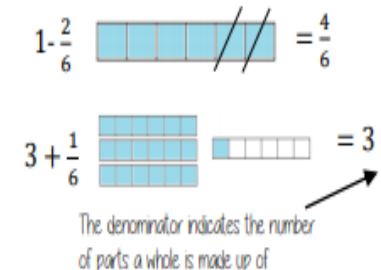
Add/Subtract Unit Fractions



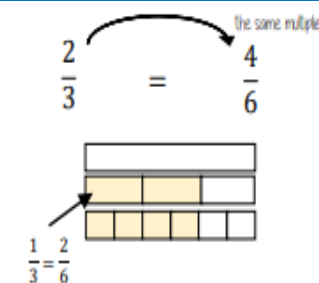
Add/Subtract Fractions



Add/Subtract From Integers

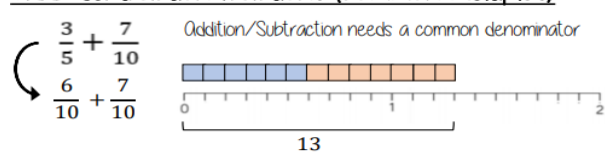


Equivalent Fractions

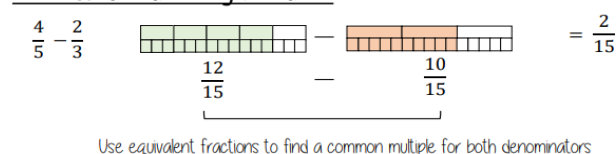


Add/Subtract Fractions

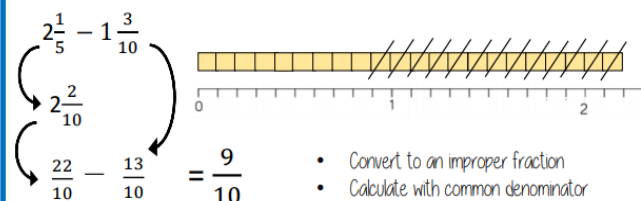
Add/Subtraction fractions (common multiples)



Add/Subtraction any fractions



Add/Subtract Fractions (Improper Fixed)

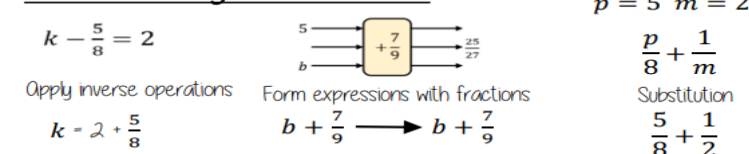


Partitioning method

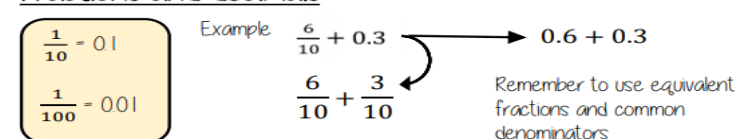
$$2\frac{1}{5} - 1\frac{3}{10} = 2\frac{2}{10} - 1\frac{3}{10} = 2\frac{2}{10} - 1 - \frac{3}{10} = 1\frac{2}{10} - \frac{3}{10} = \frac{9}{10}$$

Fractions

Fractions in algebraic contexts



Fractions and decimals



Computing Components – Key Vocabulary

Computer, System, Device, Program, Software, Instructions

CPU

The processor (CPU) is the component that **executes** program instructions.

An instruction may:

- Perform arithmetic or logic operations on data
- Perform input/output of data
- Control program flow

Computer Vs Other Appliances

Computer:

- Can do hundreds of tasks.
- **Doesn't have a specific, well-designed purpose.**

Other appliances:

- Toasters toast. Refrigerators cool. Lamps illuminate.
- **One appliance, one task.**

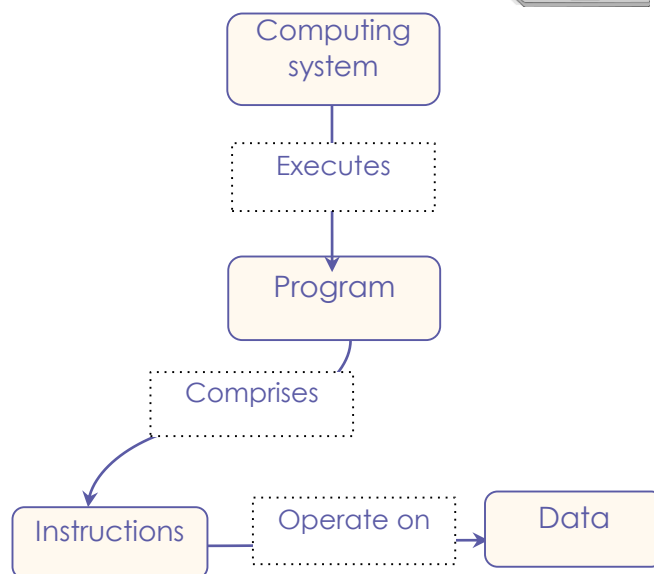


Computers

- The purpose of a general-purpose computer is to **execute programs** that operate on data.



- The term '**Computer**' applies to all kinds of general-purpose computing devices, e.g., laptop, tablet, etc.



- **All computing systems are similar in structure ('architecture').**

Key Vocabulary (Hardware & Software)

Computer, system, device, program, instructions, data, hardware, processor, memory, storage, communication, input and output, architecture

Hardware & Software

- The **physical components** of a computing system are called **hardware**.
- **Software** means **programs**.
- Example of Programs to write documents with: word processors
- Programs to visit websites with: browsers
- Programs to manipulate media with: video editing, image editing, sound editing programs

Storage

- The storage (secondary memory) is the set of components that **stores** programs and data.
- Storage is **persistent**: it retains its contents when the power is off.



Solid-state drive (SSD)



Hard disk (HDD)



USB stick



Optical disc

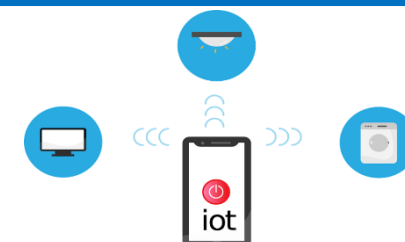


SD card

- The main memory (RAM) **stores** the programs and data **currently in use**. Memory is **volatile**: its contents are lost when the power is off.
- A storage medium is the part or thing that stores the data/information for a storage device, e.g. CD, DVD's, etc.
- An example of an external storage device that stores data are memory stick (USB stick) and an example of internal storage device is a Hard disk.
- **Primary storage** is not accessed directly by the CPU:
- The main memory (RAM) **stores** the programs and data **currently in use**. Memory is **volatile**: its contents are lost when the power is off.

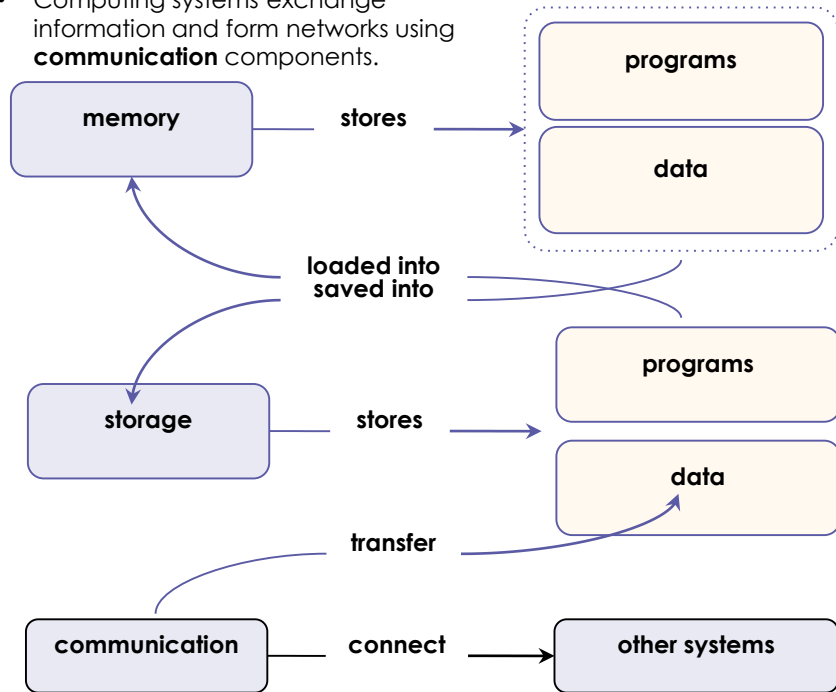
IoT

The Internet of Things means taking 'everyday' **things** and connecting them to the **internet**. These connected 'things' allow us to gather information, send information, or both.



Storage

- Computing systems exchange information and form networks using **communication** components.

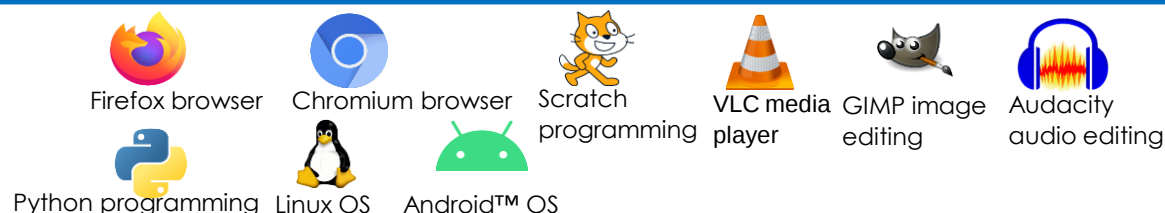


Cores

- Modern processors have multiple **cores**.
- Each core can execute instructions from a different program. (In the building analogy, this is like having multiple workers).
- How many programs can be executed at the same time? Just one! At any given time, the **processor** executes **one instruction*** that is part of **one program**.

Programs

When asked if something is a program, you could ask yourself: Does it perform a task? Does it process data?



Operating Systems

The **operating system** is a set of programs that controls the operation of a computing system.

Question: Are **operating systems** (e.g., android, ios, windows) programs?

Answer: Yes. The tasks they perform are to supervise and manage many aspects of the system's operation.

Monitoring Systems:

Software that monitors our computing system can help us visualise some of its complexity.

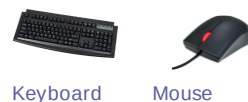
We can see measurements for:

- Processor load
- Main memory usage
- Network Activity

Computing Systems

Computing systems interact with the user and their surroundings through devices for Input and output.

Input



Keyboard

Mouse

Output



Screen

Speakers

Printer



Camera

Microphone



Projector

LEDs

Motors

Sensors

Computer Peripherals

Computer Peripherals are devices that allow input or retrieval of information.

Input devices allow a user to enter information into a computer, e.g., text is typed, voices are recorded and images are scanned.

Output devices display results after processing of information/data.

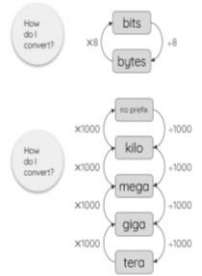
Measuring Computer Performance

CPU performance is measured in clock speed(Hertz), i.e. number of fetch-decode-execute-cycles the computer is able process/second. RAM performance is measured by speed(Hertz) and how much it can store (bytes). Hard drive performance is measured by how much it can store(bytes).

Bits, bytes, and prefixes

Unit conversions

What does it mean?	bit	b	binary digit (0 or 1)
	byte	B	8 binary digits
What does it mean?	kilo-	K	thousands
	mega-	M	millions
	giga-	G	billions
	tera-	T	trillions



Content extracted from the Teach Computing Curriculum by the National Centre for Computing Education: <https://teachcomputing.org/curriculum/key-stage-3/computing-systems>

Macbeth—William Shakespeare Terminology

Ambitious: A strong determination to achieve something

Manipulative: Being able to influence or control a situation

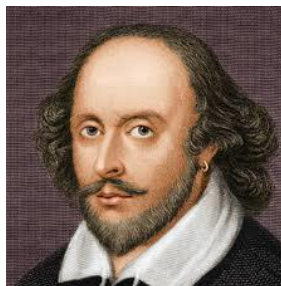
Prophecy: A prediction of what will happen in the future

Supernatural: Something beyond the understanding of science or nature i.e. magic

Noble: Belonging to the aristocracy

Soliloquy: Speaking your thoughts out loud regardless of the listener

Regicide: The action of killing a King



Themes

- Ambition
- Good Vs Evil
- Appearance Vs Reality
- Order Vs Chaos
- The Supernatural
- Loyalty and Betrayal



Context

About William Shakespeare :

Shakespeare (1564—1616) is considered by many to be the greatest and influential writers of the English language having written famous plays such as *Romeo and Juliet* and *Macbeth*. He is credited with introducing nearly 3,000 words to the English language. In addition, his works are said to be the second most often quoted after the Bible.

Historical context about the play:

Written in 1606, *Macbeth* contains a strong political theme throughout, with the idea that excessive ambition has terrible consequences. Shakespeare enjoyed a close relationship with King James I and it is thought that in focusing on Macbeth as a figure from Scottish history, he was paying homage to the King's lineage.

Key Quotations

MACBETH

- "Fair is foul and foul is fair" Act 1 Scene 1
- "Look like the innocent flower, but be the serpent under 't." Act 1, Scene 5
- "Yet do I fear thy nature, It is too full o' th' milk of human kindness" Act 1, Sc.5
- "Is this a dagger which I see before me?" Act 2, Scene 1
- "Double, double toil and trouble; Fire burn, and cauldron bubble." Act 4, Sc.1
- "Here's the smell of the blood still. All the perfumes of Arabia will not sweeten this little hand."
- "Out, damned spot! Out, I say!" Act 5, Scene 1

Learning Objectives

By the end of the term, I can communicate (talk, ask and answer) about:

- My family
- School subjects
- Your friends
- Your home

Grammar Objectives

I will be able to understand and apply rules about:

- Present tense avoir and être
- Pronoms le, la, les
- Possessive adjectives
- Adjectives agreement
- Connectives
- Comparatives

School

l'anglais	English
les arts plastiques	Art
l'EPS	Sport
le français	French
la géographie	Geography
l'histoire	History
les maths	Mathematics

la musique	Music
les SVT (sciences de la vie et de la terre)	Science
la technologie	Technology
Ma matière préférée, (c'est) ...	My favourite subject is ...
j'adore (ça)	I love (it/that)
j'aime (ça)	I like (it/that)
ça va	it's OK
je n'aime pas (ça)	I don't like (it/that)
je déteste (ça)	I hate (it/that)
C'est ...	It's ...
créatif/ennuyeux/inutile/passionnant/nul/relaxant/utile	creative/boring/pointless/exciting/rubbish/relaxing/useful
C'est plus/moins intéressant que ...	It's more/less interesting than ...

Friends

J'ai un/une meilleur(e) ami(e).	I've got a best friend.
Je n'en ai pas.	I don't have one/any.
J'ai une grande bande de copains.	I have a big group of friends.
Je le/la/les connais depuis ...	I have known him/her/them ...
... un an/deux ans.	... for one/two years.
... que je suis petit/bébé.	... since I was small/a baby
... toujours.	... always
... l'école primaire.	... since primary school

Family

J'habite avec ...	I live with ...
J'ai ... qui s'appelle/s'appellent ...	I have ... who is/are called ...
il/elle s'appelle	he/she is called
ils/elles s'appellent	they are called
je l'appelle	I call him/her/it
Je n'ai pas de ...	I don't have a ...
Je n'ai plus de ...	I don't have a ... any longer.
séparés/divorcés	separated/divorced
adoptif	adoptive
Je suis fils/fille unique.	I am an only child.
une mère/belle-mère	mother/step-mother
un père/beau-père	father/step-father
des parents	parents
maman/papa	mum/dad
une sœur/demi-sœur	sister/half-/step-sister
un frère/demi-frère	brother/half-/step-brother
des grands-parents	grandparents

Opinions & Connectives

À mon avis, ...	In my opinion, ...
Je pense que ...	I think that ...
On dit que ...	People say that ...
parce que / car	because
et	and
mais / par contre	but / on the other hand

Describing Personality

Tu es comment?	What are you like?
Je suis quelqu'un de (d') ...	I am a(n) ... person.
je suis/je ne suis pas	I am/I am not
tu es/tu n'es pas	you are/you are not
il/elle est	he/she is
un peu/assez/très	a bit/quite/very
actif	active
adorable	adorable
amusant	funny
bavard	chatty/talkative
courageux	brave
créatif	creative
fidèle	faithful
généreux	generous
gentil	kind
heureux	happy
intelligent	intelligent
méchant	horrible
sociable	sociable
sportif	sporty
timide	timid/shy
travailleur	hard-working

Key Grammar

Verbe Etre / to be (present tense)

Je suis / I am

Tu es / you are

Il/elle/on est / He-she is

Nous sommes / we are

Vous êtes / You are

Ils/elles sont / they are

Verbe Avoir / to have (present tense)

J'ai / I have

Tu as /you have

Il/elle/on a / He-she has

Nous avons / we have

Vous avez / You have

Ils/elles ont /they have

le, la, les

Le, la, les mean 'the' but they can also mean 'him', 'her' and 'them'.

Mon meilleur ami s'appelle Baptiste.	Je le connais depuis trois ans.	I have known him for three years.
Ma meilleure amie s'appelle Emmeline.	Je la connais depuis six ans.	I have known her for six years.
Mes meilleurs amis s'appellent Jeanne et Luc.	Je les connais depuis dix ans.	I have known them for ten years.

Making comparisons

Use *plus* (more) or *moins* (less) in front of adjectives to make comparisons between subjects.

Le français, j'aime ça.	C'est plus intéressant	que	l'anglais.
L'anglais, je n'aime pas ça.	C'est moins intéressant	que	le français.

	masculine	feminine
je suis ...	amusant	amusante
	intelligent	intelligente
	bavard	bavarde
	actif	active
	créatif	créative
	sportif	sportive
	courageux	courageuse
	paresseux	paresseuse
	travailleur	travailleuse
	sociable	sociable
	timide	timide
	adorable	adorable

Possessive adjectives are the words that describe who or what something (or someone) belongs to.

masculine	feminine	plural	
mon	ma	mes	my
ton	ta	tes	your

Model Text

Tu es comment ?	Je suis un peu timide. Je suis intelligent.	I am a bit shy. I am intelligent.
Tu es comment ?	Je ne suis pas sociable. Je ne suis pas amusant(e).	I am not sociable. I am not funny.
Comment est ta famille ?	Ma famille est sympa. Ma famille est grande.	My family is nice. My family is big.
Tu as des frères et sœurs ?	Oui, j'ai un frère et deux sœurs. Non, je n'ai pas de frère et sœur. Je suis fils/fille unique.	Yes, I have one brother and two sisters. No, I don't have brother and sister. I am only one child.
Avec qui habites-tu ?	J'habite avec mon père, ma mère et mes trois sœurs.	I live with my dad, my mum and my three sisters.
Comment s'appelle ton frère/ta sœur ?	Mon frère s'appelle Ma sœur s'appelle...	My brother called... My sister called...
Tu aimes l'école ?	Oui, j'aime l'école. Non, je n'aime pas l'école.	Yes, I like school. No, I don't like school.
Quelles matières préfères-tu ?	Je préfère les maths et les sciences.	I prefer Maths and Sciences.
Tu aimes le Français ? Pourquoi ?	Oui, j'adore le Français Car c'est très intéressant.	Yes, I love French Because it is very interesting.
Comment est ton/ta meilleur(e) ami(e) ?	Mon/ma meilleur(e) ami(e) est loyal(e).	My best friend is loyal.
Comment s'appelle ton/ta meilleur(e) ami(e) ?	Mon/ma meilleur(e) ami(e) s'appelle...	My best friend called...
Comment étais-tu petit(e) ?	Quand j'étais petit(e) j'étais paresseux(se)	When I was little, I was lazy.

Gymnastics

Hand:

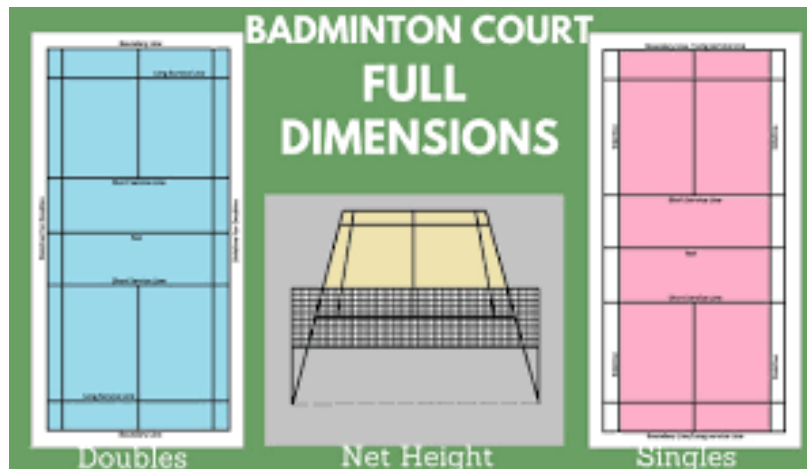
- Perform a mixture of balances and rolls
- Sequencing

Head:

- To plan 3 balances.
- To plan a sequence of balances and rolls (complex and simple sequences)

Heart:

- Demonstrate communication when working in a pair/group.



Badminton

Hand:

- Serves - low and short, high and deep,
- Clear shot – forehand and backhand; attacking and defending; overhead and underarm
- Drop shot
- Drives shot – forehand, backhand
- Smash

Head:

- Appropriate choice of shot in relation to the situation
- Application of skills/techniques and tactics: movement, pressure, deception, serving
- Appropriate choice of length, height, speed
- Adhering to the rules and health and safety guidelines

Heart:

- Officiating other games

Basketball

Hand:

- Passing (chest/bounce/overhead)
- Dribbling (use of both hands, change of direction, pace)
- Shooting
- Rebounding and stopping (jump stop/stride stop)

Head:

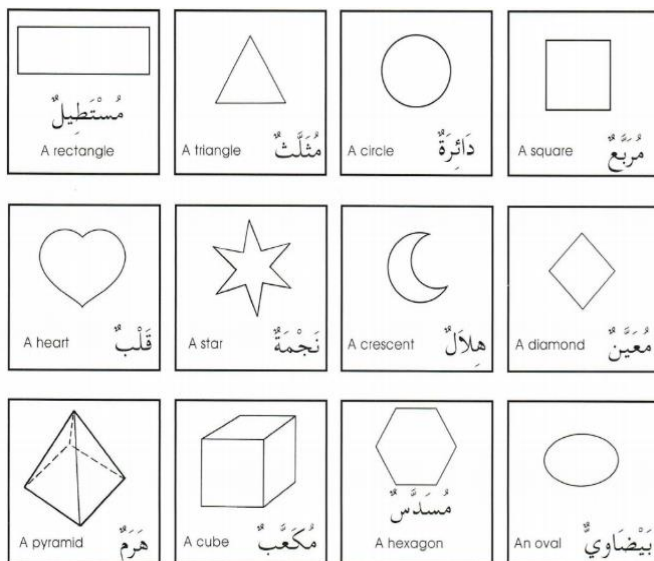
- Decision making
- Adhering to the rules (half-court defence, out of bounds)
- Attacking and defending
- 1 v 1 situations

Heart:

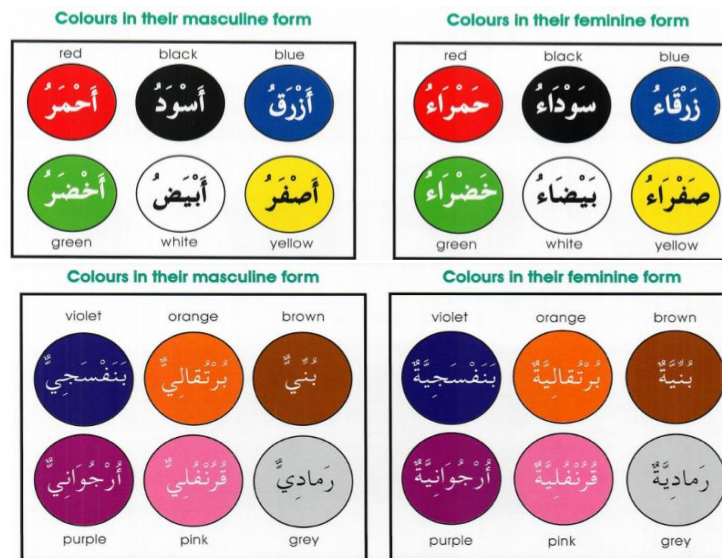
- Ability to influence the performance and motivation of self and others
- Impact of communication and teamwork during a game



Shapes



Colours



A Nominal Sentence

الْجُمْلَةُ الْإِسْمِيَّةُ

Is a sentence that begins with a noun **إِسْم**. It has two parts: the **subject** **المُبْتَدَأُ** and the **predicate** **الخَبَر**.

- * The Subject will always be Definite (will begin with ال)
- * While the Predicate will always be Indefinite (will only take a Tanween)
- * When the Subject and the Predicate come together, they form a full sentence.

الخَبَر	المُبْتَدَأُ	الْجُمْلَةُ
جَدِيدَةٌ	السَّيَّارَةُ	السَّيَّارَةُ جَدِيدَةٌ.

Translation: The car is new

Numbers

	Fem.	Masc.	
1	وَاحِدَةٌ	وَاحِدٌ	١
2	اِثْنَتَانِ	اِثْنَانِ	٢
3	ثَلَاثَةٌ	ثَلَاثٌ	٣
4	أَرْبَعَةٌ	أَرْبَعٌ	٤
5	خَمْسَةٌ	خَمْسٌ	٥
6	سِتَّةٌ	سِتٌّ	٦
7	سَبْعَةٌ	سَبْعٌ	٧
8	ثَمَانِيَةٌ	ثَمَانٍ	٨
9	تِسْعَةٌ	تِسْعٌ	٩
10	عَشْرَةٌ	عَشْرٌ	١٠

Asking Questions

So far, we have learnt how to ask 'What is...?' using the word **مَا؟**

To ask 'Who is ...?' we use the word **مَنْ؟**

Who is that? (masculine) **مَنْ ذَلِكَ؟** Who is this? (masculine) **مَنْ هَذَا؟**

Who is that? (feminine) **مَنْ تِلْكَ؟** Who is this? (feminine) **مَنْ هَذِهِ؟**

هَلْ and **أَ**, which are written at the beginning of a sentence, are two ways of asking questions such

as 'Is this...?' in Arabic. e.g. Is this a pen? **هَلْ هَذَا قَلَمٌ؟** or **أَهَذَا قَلَمٌ؟**

Note how **أَ** becomes part of the following word, but **هَلْ** is written separately.

In order to answer this type of question, we need to learn the words for 'yes' and 'no' in Arabic:

Yes = **نَعَمْ** and no = **لا**.

Note also the shape of the question mark in Arabic: **؟**

Body Part Names

Masculine Nouns			Feminine Nouns		
body	جِسْمٌ	head	رَأْسٌ	hair	شَعْرَةٌ
chest	صَدْرٌ	face	وَجْهٌ	eye	عَيْنٌ
stomach	بَطْنٌ	nose	أَنْفٌ	ear	أُذُنٌ
arm	ذِرَاعٌ	cheek	خَدٌ	lip	شَفَّةٌ
shoulder	كَتِفٌ	mouth	فَمٌ	tooth	سِنٌ
elbow	مِرْفَقٌ	tongue	لِسَانٌ	tongue	لِسَانٌ
wrist	مِعَصَمٌ	chin	ذَقَنٌ	forehead	جَبْهَةٌ
thumb	إِبْهَامٌ	neck	عُنُقٌ		
finger	إِصْبَعٌ	back	ظَهْرٌ		

Note that many (though not all) of the parts of the body that occur in pairs are feminine.

Friends & Family

اسْمِي حَسَنٌ. لِي أُخْتُ اسْمُهَا نَادِيَّةٌ.

أَبِي رَجُلٌ طَوِيلٌ. اسْمُهُ يَوْسُفٌ.
وَهُوَ طَبِيبٌ فِي الْمُسْتَشْفَى.
وَأُمِّي هِيَ مُعَلِّمَةٌ فِي مَدْرَسَتِي.
هِيَ أَمْرَأَةٌ قَصِيرَةٌ وَجَمِيلَةٌ.
اسْمُهَا زَيْنَبٌ.
لِي صَدِيقٌ اسْمُهُ مُحَمَّدٌ.

Rivers

A river is a moving body of water that flows from its **source** on high ground, across land, and then into another body of water, which could be a **lake**, the **sea**, an **ocean** or even another river.



Flooding

A flood occurs whenever a river overflows its banks. A flood becomes a problem when the water rises to a level where it threatens property and/or life. Rivers usually flood due to a range of physical factors, which can be divided into climatic factors and drainage basin characteristics. Human intervention can also make flooding worse



River Processes

- **EROSION** where rocks are worn away and the land changes shape
- **TRANSPORTATION** where eroded material is carried by the river downstream
- **DEPOSITION** where transported material is dropped when the river loses energy, such as when it enters the sea

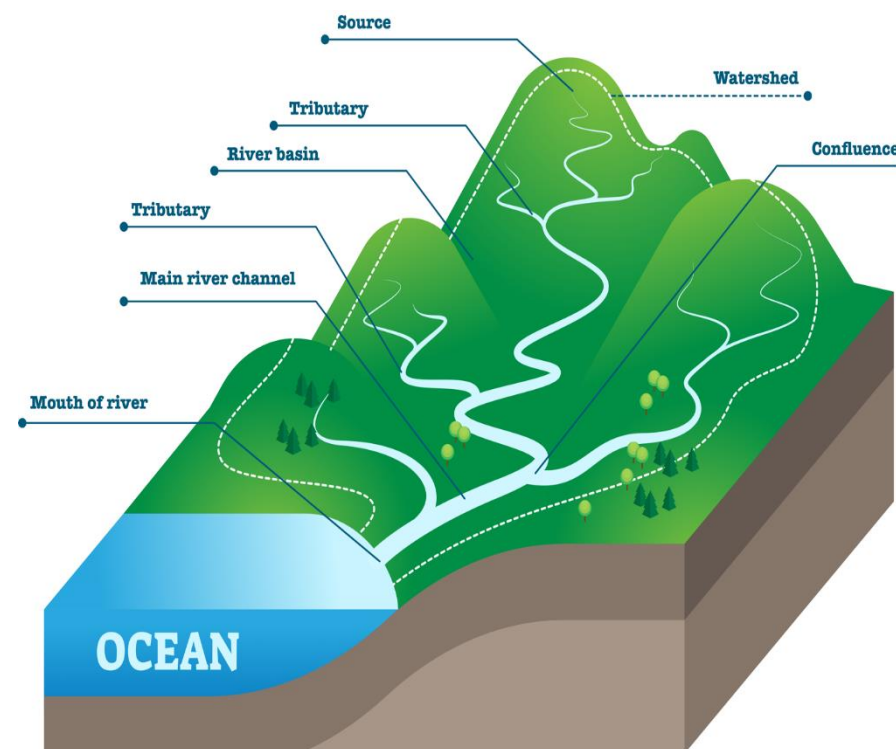


Key Words

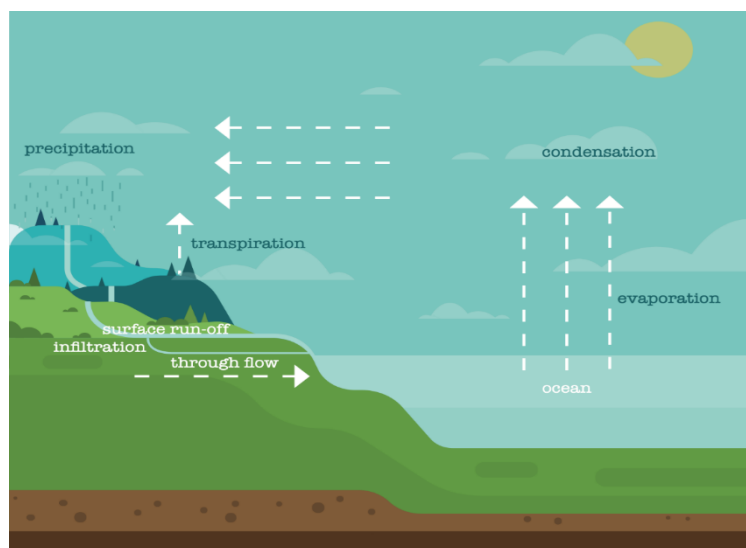
- CAUSE
- EFFECT
- RESPONSE
- LONG PROFILE
- CROSS PROFILE
- V-SHAPED VALLEY
- WATERFALL
- MEANDER
- OXBOW LAKE
- FLOODPLAIN



Drainage Basin



Hydrological Cycle



Topic

Medieval Religious Beliefs

Monks

Monks are men that decided to devote their whole lives to God. They left their families, homes and possessions and moved into a Monastery as a Monk. Monks first arrived in England in the sixth century when Saint Augustin a Benedictine monk, built the first Monastery.

A Monk's life was not an easy one. They could not be married, ate very simple food and worked hard and their lives were dominated by prayer; every three hours; day & night!



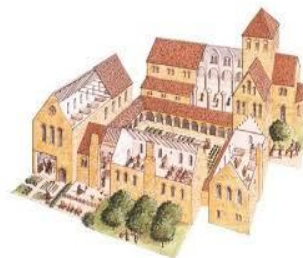
Nuns

Women could become nuns, lived in Nunneries and lived lives that were similar to Monks. Nunneries were often built next to monasteries. There were not as many Nuns as Monks though, and they hardly ever worked with books or manuscripts. Usually, women had to pay to become a nun. Sometimes a family might pay a fee called a dowry to a Nunnery so that one of their daughters could become a nun. Nuns were important to unmarried women who might not be supported otherwise



Monasteries

Monasteries were the buildings which were devoted to God where monks lived. Nuns lived in similar buildings called nunneries. The monastery also included a library and were one of the few places where people could read and write. They also looked after the sick and the poor and provided work for people in the community



Was The Church Central To Peoples Lives?

Evidence that the Church was central to people's lives

Medieval people went on pilgrimages, visiting holy sites in the hope of curing illness and gaining entry into Heaven after they died. People went on Crusades, fighting to claim back the Holy Lands from the Muslims. The Crusades were long and dangerous. Doom paintings showed scenes from the Afterlife, and encouraged Medieval people to behave properly so they could enter Heaven. Most people believed they could not go to Heaven if they did not follow the church's rules

Evidence that the Church was not central to people's lives

Some people went on pilgrimages for non-religious reasons. Sometimes they hoped to make money and sometimes they just wanted adventure. The Crusaders could steal and loot from the Holy Lands. Some Crusaders acted violently towards the people in the Holy Lands. There were some people who did not have a strong Christian faith. Near the end of the Medieval period some people began to question the church's teachings.

Key Terms

Pope	Leader of the Catholic church. People believed the Pope was chosen by God and so was infallible (Could not make mistakes)
Archbishop	The head of the church in England. Had the power to crown kings and run the church courts
Bishops	Officials who helped the archbishop run the Catholic church
Parish Priest	Led individual churches in small communities
Excommunicate	When the archbishop or the Pope banned someone from the Catholic church. If you were excommunicated, people believed you could not go to heaven
Latin	The language that was used for church sermons (talks) and for the bible
Pilgrimage	A long journey, usually to an important religious site
Doom painting	A large painting in a medieval church, usually showing scenes from Heaven, Hell and the Afterlife
Crusade	Expedition (long trip) made to take back the Holy Lands, especially Jerusalem, from the Muslims
Relic	An object thought to have religious importance, like a cross owned by a saint
Purgatory	The place where a sinner goes before his or her soul is allowed to enter Heaven
Mass	An important religious ceremony for Catholics
Superstition	A belief based on magic and the unknown, like good and bad luck
Tithe	A tax of 10% of people's income that was paid to the church each year

Looking After Ourselves-Key words

Puberty	The physical changes through which a child's body matures into an adult.
Adolescence	Following the onset of puberty during which a young person develops from a child into an adult.
Hormones	Essential for every activity of life, including the processes of digestion, metabolism, growth, reproduction, and mood control.
Mental Health	Our emotional, <i>psychological</i> , and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices.
Emotional Health	A person's ability to accept and manage feelings through challenge and change.
Self Esteem	An individual's evaluation of their own worth, beliefs about oneself as well as emotional states, such as triumph, despair, pride, and shame.
Body confidence	How a person feels about the way they look. When we have body confidence we accept, and are happy with, how we look and what our bodies can do.
Healthy lifestyle	A state of complete physical, mental, and social well-being.
Peer pressure	Peer pressure is the direct influence on people by peers, or the effect on an individual who gets encouraged to follow their peers by changing their attitudes, values or behaviours to conform to those of the influencing group or individual. This can result in either a positive or negative effect, or both.

What Skills will I Develop in Heart for Life?

Each lesson will have opportunities to develop your skills through a variety of learning activities, ranging from:

- Thinking skills
- Enquiry and evaluation skills
- Research skills
- Debate and communication skills
- Active learning.
- Reflective learning skills.
- Personalised learning skills.
- Revision and recall.



Overview

Students will explore the different stages of puberty and changes during adolescence. They will consider how puberty impacts their emotional and mental health, how they can cope with hormonal changes and maintain a healthy lifestyle throughout their adolescence. Students will also look at strategies to maintain positive self esteem and body confidence through puberty and hormonal changes.

Key Concepts

Relationships, Living in the Wider World and Health and Wellbeing.

Essential Attributes Developed Through Life Skills.

- Self-Improvement
- Resilience
- Self-organisation
- Clarifying own values
- Developing and maintaining a healthy self concept
- Empathy and compassion
- Respect for others
- Skills for employability
- enterprise skills

Bicycle Project-Learning Objectives

- To understand key elements of BICYCLE drawings and paintings
- To understand and explore drawing techniques taking inspiration from different artists including Rosina Wachtmeister, Elizabeth Frazer and Dolan Geiman
- To explore and use studied techniques in colour, paint and colour layering
- To understand layout and relationship of parts and elements of the bicycle
- To explore and understand bicycles in different cultures around the world
- To understand the history of the bicycle
- To explore areas of drawing with shapes, sizes, sections and proportions
- To explore and refine drawing and collage techniques
- To understand and explore areas of dark, light, shadow, tone and line
- To research and be aware of world cultural differences and similarities
- To understand bicycles in sculpture, museums and street art

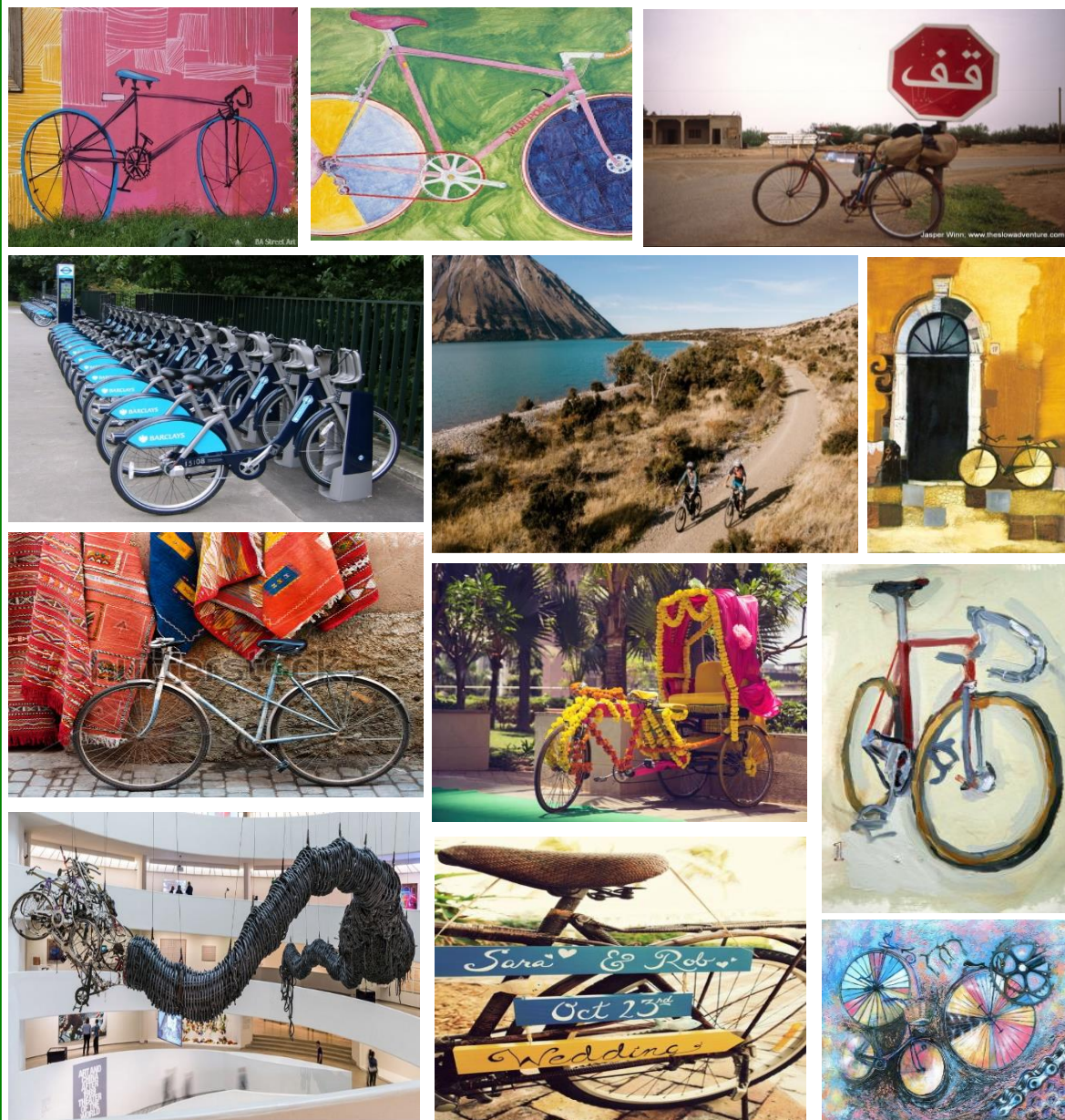
Content

- Students will be taught about health and safety, the colour wheel, primary, secondary and tertiary colours, drawing techniques.
- Students will be taught about pencil drawn techniques, colours, colour layering, non perspective and abstract drawing.
- Students will be taught how to analyse images and paintings, using their skills with oracy, class discussion and written work.
- Students will talk about and discuss the strengths and areas of development of their own work through ORAL, written, self and peer assessment.
- Students will explore visual ideas and themes which involve bicycles
- Students will create personalised work taking inspirations from a range of artists and photographers.
- Students will study the works of the artists – Holly Wells, Carina Di Bella, Rosina Wachmeister, Elizabeth Frazer, Jeffery B. Gribble, Dolan Geiman, Art & China at the Guggenheim Museum, Ai Weiwei, Linda Apple
- Students will complete a final piece at the end of this unit.

Key Words

Pattern, cycles, bicycles, wheels, handles, close up, weddings, abstract, paintings, depth, content, detail, background, middle ground, foreground, crayons, colour, colour mixing, saddle, seat, Morocco, New Zealand, London, India, chain, pedal, Linda Apple, Rosina Wachtmeister, Venice, crank arm, floral, decoration, Tour de France, paints, multi coloured, collage, colour layering, Guggenheim Museum, bicycle parking.

Images



Bags for Life

Students will use a variety of specialist fabric paints and crayons to create a bag for life.

Objectives

- To develop an interesting and complex pattern using simple shapes.
- To design and make a decorative bag for life.
- To understand how to use fabric decorating media.

Content

Students will learn about the six Rs relating to the consumption and usage of textiles. Students will design a contrasting pattern using only circles and stripes. They will then use fabric media to transfer their work onto a bag for life, selecting the correct materials for each section and showing an understanding of how to work with that media, to create different effects. The bags will be heat-sealed to prevent fading of the media when washed.

Key words

Design, make, contrasting, texture, pattern, shape, form, colour, complex, decoration, media, heat- sealed. Reuse, recycle, repair, rethink, refuse, reduce.

Images



Topic

Christianity:

- Beliefs
- Worship
- Practice



Key Words

- Jesus
- Church
- Messiah
- Bible
- Trinity
- Saviour



Jesus As The Messiah

Messiah is a Hebrew word meaning 'anointed one'. Christians believe that Jesus is the Messiah because through his crucifixion and resurrection he brought salvation to humankind.

God gave his only son, Jesus, so that all humans could be saved

Jesus was a perfect human - he had no sin

God placed all of humanity's sins on Jesus when he was crucified

Jesus' actions meant that there was a reconciliation between God and humanity

Jesus' death atoned for human sin

As a result of Jesus' sacrifice, humans now have the possibility of going to Heaven

Christianity

Beliefs

While there are many different types of Christians, the majority of Christians share the same basic beliefs. All Christians believe in one God, and most also believe that Jesus was God's son sent to Earth in human form. Jesus was put to death but was resurrected and ascended to heaven. Christians believe that the events of Jesus's life are important and that people should follow his teachings.

Holy Book

The Christian holy book is the Bible, which means 'books' as it is a collection of many different books gathered together into a single volume. The Christian Bible is divided into the Old and New Testaments.

The Old Testament was written before the birth of Jesus and is based on ancient Jewish scriptures called the Tanakh. In Protestant Christianity, there are 39 Old Testament books, with 46 in Catholicism.

Worship

Many Christians worship in special buildings such as churches or chapels, and Christian worship can be different depending on the denomination.

Symbol

The cross is the symbol of Christianity. Jesus Christ was executed by the Romans and died by being crucified on a wooden cross. Christians remember his death and resurrection by wearing crosses. Sometimes crosses will have a figure of Jesus on them. These are called crucifixes.

Denominations

Christians share many beliefs, but they don't all agree on everything. This has resulted in the development of different groups within the religion called denominations. Examples of these include Anglican, Methodist, Baptist and Catholic. Different Christian denominations worship in different ways. Anglicans, Catholics and Orthodox Christians have a set form of worship. It is a formal ritual based around the sacraments, particularly Holy Communion.

Jesus As The Son Of God

Most Christians believe that Jesus, as well as being fully human, is also fully God. Most Christians believe that Jesus is the second person of the Holy Trinity and is the Son of God.



MADANI SCHOOLS FEDERATION